

Application No. 10/652,583

Paper Dated: December 30, 2005

In Reply to USPTO Correspondence of August 31, 2005

Attorney Docket No. 0388-031709

### **AMENDMENTS TO THE SPECIFICATION**

Please replace the paragraph beginning on page 5, line 10 with the following amended paragraph:

In Figs. ~~4~~ and 7-9, numeral 25 denotes a backhoe as an example of a swiveling utility vehicle. In this backhoe 25, a swivel table 2 is supported to a traveling vehicle body 27 having right and left crawler traveling units 26, with the table 2 being swivelable about a swivel shaft 28 provided as a vertical shaft. And, a boom assembly 1 is attached to the front of this swivel table 2.

Please replace the paragraph beginning on page 5, line 25 with the following amended paragraph:

In its plan view, the swivel table 2 has right and left sides extending substantially parallel with each other along the fore and aft direction of the vehicle, a front side extending substantially parallel with the right and left direction of the vehicle and a rear side formed arcuate. The table 2 mounts the boom assembly 1 at a position projecting from the front side thereof. Further, in this swivel table 2, a distance from [[a]] the swivel shaft 28 to the rear end of the table 2 is about 2 times of a twice the distance from the shaft 28 to the front end of the table 2, so that this table 2 is provided as a so-called compact standard swiveling type table 2.

Please replace the paragraph beginning on page 6, line 23 with the following amended paragraph:

In Figs. 1-4 and 7-9 ~~1 through 9~~, the boom assembly 1 includes a receiving bracket 3 provided at the front of the swivel table 2. This receiving bracket 3 is formed integrally with a member forming the swivel table 2 or formed separately. The receiving bracket 3 includes at the front thereof vertically separated receiving portions 3U, 3D projecting forwardly. And, these upper and lower receiving portions 3U, 3D define holes for inserting vertical shafts 5.

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Please replace the paragraph beginning on page 6, line 30 with the following amended paragraph:

The boom assembly 1 includes a swing bracket 4 pivotally supported to the receiving bracket 3 via the vertical shaft 5, a boom 6 having a base end thereof pivotally supported to the swing bracket 4, an arm (vertically movable member) 8 attached to a leading end of the boom 6 to be pivotable about a horizontal shaft 17, and a bucket (implement) 13 pivotally supported via a horizontal shaft 47 to a leading end of the arm 8.

Please replace the paragraph beginning on page 7, line 6 with the following amended paragraph:

In operation, the boom 6 can be lifted via a boom cylinder 7 from an elevated posture shown in Fig. 7 to a lowered posture into the ground. And, with the respective postures of the boom 6, the arm 8 can be moved up and down by an arm cylinder (vertically movable cylinder) 9. And, at the respective postures of the boom 6 and the arm 8, the bucket 13 can be operated by a bucket cylinder (implement cylinder) 21 for scooping and dumping operations. The cylinders 7, 9 and ~~12~~ 21 comprise hydraulic cylinders.

Please replace the paragraph beginning on page 7, line 22 with the following amended paragraph:

The vertical shafts 5 are two separate coaxial upper and lower shafts 5. The upper shaft 5 connects the upper receiving portion 3U and the upper support portion 4U together. The lower shaft 5 connects the lower receiving portion 3D and the lower support portion 4D together. And, there is formed a free space between these upper and lower shafts 5. Instead, only one vertical shaft 5 may be provided to be inserted through the upper and lower assemblies.

Please replace the paragraph beginning on page 7, line 29 with the following amended paragraph:

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Referring to the swing bracket 4, the intermediate portion thereof between the upper and lower support portions 4U, 4D is bifurcated in the right and left direction. And, a hole is formed as being surrounded by right and left side walls 4A and the upper and lower support portions 4U, 4D. And, this hole is provided as an insertion hole 4B for a hydraulic oil pipe pipes 34 as will be described later herein. Further, to this bracket 4, the a base end portion [[6]] 6B of the boom 6 is engaged to be pivotally supported via the horizontal shaft 15.

Please replace the paragraph beginning on page 8, line 11 with the following paragraph:

The swing bracket 4 further includes a connecting arm portion 4E extending laterally from one of the upper and lower support portions 4U, 4D, to this, To this connecting arm portion 4E, there is connected a piston rod of the swing cylinder 33 pivotally supported to the swivel table 2 (see Fig. 8 also).

Please replace the paragraph beginning on page 8, line 25 with the following amended paragraph:

Referring to Figs. 1 through [[6]] 5, the boom 6 includes a body 6A formed as a tubular, i.e. hollow, structure having a substantially rectangular cross section by either welding upper and lower plates to a pair of right and left side plates of plate metal or fixing a plate member to an opening side of a member having a bent cross section for closing the opening. And, a longitudinally intermediate portion of this tubular body 6A is formed as a bent portion P which is bent as seen in a side view thereof. Further, into the opposed ends of this body 6A, [[a]] the base end member 6B and the [[a]] leading end member 6C formed by casting are fixedly inserted.

Please replace the paragraph beginning on page 9, line 13 with the following paragraph:

Further, in this boom 6, between the bent portion P and the base end, there is formed a reverse-bent portion Q bent reversely relative to the hook of the bent portion P of the body

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6A. More particularly, an intermediate portion of the base end member 6B is bent to project (upward) in the direction away from the boom cylinder 7.

Please replace the paragraph beginning on page 9, line 18, with the following amended paragraph:

Therefore, as shown in ~~Figs. 1 and Fig.~~ 3, a center line S2 extending from the reverse-bent portion Q to the horizontal shaft 15 intersects, by an angle R, a longitudinal center line S1 of the boom 6.

Please replace the paragraph beginning on page 10, line 7 with the following amended paragraph:

In the back faces of the base end member ~~6A~~ 6B and the leading end member 6C, there are formed insertion holes 12A, 12B communicated with the inside of the hollow body 6A. With this, the boom 6 is formed hollow continuously through the entire length thereof for allowing insertion of the hydraulic oil pipes 34.

Please replace the paragraph beginning on page 11, line 6 with the following amended paragraph:

As shown in ~~Fig. 1~~, Fig. 5 and Fig. 10, the arm 8 is formed by fixing a top plate 8b to the upper edge of an upwardly open channel member 8a. And, holes for the connecting pin (arm pivot shaft) 17 are formed at the base portion of the channel member 8a. Further, the opposed side walls of the channel member 8a are cutaway by a certain amount for half of the base end portions thereof. Therefore, the top plate 8b for closing the upward opening of this channel member 8a comprises an intermediately bent shape sectioned along the length thereof into an upper portion 24 and a lower portion 23 across a stepped portion 22 formed therebetween. To the opposed side faces of the arm 8, the pair of right and left connecting brackets 16 are welded.

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Please replace the paragraph beginning on page 12, line 14 with the following amended paragraph:

The insertion hole 12B of the leading end member 6C is provided as an outlet opening for taking out the hydraulic oil pipes 34B, 34C for feeding pressure oil to the bucket cylinder 21, the external hydraulic implement 45, etc. to the side of the arm 8.

Please replace the paragraph beginning on page 12, line 24 with the following amended paragraph:

Adjacent the stepped portion 22 and at the projecting portions of the right and left connecting brackets 16 creating the protection space 48 there is disposed a pipe joint 42. More particularly, this pipe joint [[48]] 42 is disposed within the protection space 48 and at a position closer to the base of the arm 8 than to the bucket cylinder 21 not to be overlapped with the bucket cylinder 21 in the longitudinal direction of the arm 8. This disposing arrangement is indented for avoiding sliding contact with the hydraulic oil pipe 34B for the bucket cylinder 21.

Please replace the paragraph beginning on page 13, line 8 with the following amended paragraph:

The hydraulic oil pipes 34, as shown in FIG. 8, are connected to control valves 35 provided within the swivel table 2, and as shown in Fig. 8, these control valves 35 are operable respectively by the implement controllers 36 provided on the right and left sides of the driver's seat 30.

Please replace the paragraph beginning on page 13, line 12 with the following amended paragraph:

The hydraulic oil pipes 34 extend from the control valves 35 provided inside the swivel table 2 through the inside of the receiving bracket 3 to the outside as shown in Figs. 1 and 3. The pipes 34 further extend through the insertion hole 4B of the swing bracket 4 and then extend

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through the insertion hole (introducing opening) 12A into the hollow boom 6. Among these pipes 34, the The hydraulic oil pipe pipes 34A extends extend through the insertion hole (outlet opening) 12C to the outside to be connected to the boom cylinder 7 or and the arm cylinder 9. Whereas, as shown in Figs. 1 and 5-6, the The hydraulic oil pipes 34B, 34C further extend to reach the insertion hole (output opening) 12B provided at the leading end of the boom 6 and extends further out of the boom 6 and then through between the connecting pin 17 and the pin 19 to enter the space between the right and left connecting brackets 16 and reaches the disposing protection space 48 upwardly of the lower portion 23 of the arm 8, in which the hydraulic oil pipe 34C is connected to the pipe joint 42 and further connected via the hose joint 43 to the hose 44 of the external hydraulic implement 45, whereas the other hydraulic oil pipe 34B further extends to be connected eventually to the bucket cylinder 21.